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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/743,207	12/22/2003	Hannu Juhani Anttila	KOLS.077PA	6888
7590 Hollingsworth & Funk, LLC Suite 125 8009 34th Avenue South Minneapolis, MN 55425			EXAMINER LOO, JUVENA W	
			ART UNIT 2609	PAPER NUMBER
			MAIL DATE 07/12/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/743,207	Applicant(s) ANTTILA, HANNU JUHANI	
	Examiner Juvena W. Loo	Art Unit 2609	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-15 is/are allowed.
- 6) ☒ Claim(s) 16-21 is/are rejected.
- 7) ☒ Claim(s) 1, 8, 9, and 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is in response to application filed on December 22, 2003 in which claims 1 to 21 are presented for examination.

Status of Claims

Claims 1-21 are pending, of which claims 1, 8, 9, and 16 are in independent form.

Claim Objections

1. Claims 1, 8, 9, and 16 are objected to because of the following informalities: in particular, claims 1, 8, 9, and 16 are objected to because applicant should place a ":" behind "comprising" in line 9 of claim 1, in line 1 of claim 8, in line 7 of claim 9, and line 25 of claim 16. This will help clarify claim language by distinguishing between the preamble and body of the claimed invention.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 16-21 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claim 16 is directed to a computer

software product wherein the claim describes said product as being merely a software code. Since the specification has no definition, examiner can only assume applicant intended "computer readable medium" to include intangible media such as signals, carrier waves, transmissions, optical waves, transmission media or other media incapable of being touched or perceived absent the tangible medium through which they are conveyed.

Allowable Subject Matter

4. Claims 1-15 are allowable over the prior art of record.
5. The following is an examiner's statement of reasons for allowance:

Regarding claims 1-15, the present invention is directed to a system and method of detecting a high load situation, as indicated by the number of unacknowledged data units by the link control layer during the transfer of data units from the radio link layer to the link control layer. The closest prior art (US Patent Application # 10/712,636 submitted by Pecan et al.) discloses a method and apparatus for controlling the data transfer from the radio link layer to the link control layer by inserting a virtual bearer component in between the two layers. The virtual bearer component serve as a gauge for the data flow. Data units are put into the virtual bearer component by the radio link layer. The data transfer is paused when the amount of data in the virtual bearer component is filled to an upper threshold level and is resumed after the amount of data in the virtual bearer component is lowered, as the data units are being taken out from the bearer by the link control layer, to a lower threshold level. However, Pecan fails to

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disclose the aspects of the acknowledgment from the link control layer and the intermission of data transmission until a certain number of data units has been acknowledged by the link control layer. This claimed limitation in combination with all the other features present in the independent claims 1, 8, and 9 render the claims allowable over the prior art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Cao (US 2004/0252664 A1) discloses a method to transmit a data frame from one station to another station. Garani (US 2003/0165133 A1) discloses a method of using successive transmission control protocol connections within a wireless packet data system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juvena W. Loo whose telephone number is (571) 270-1974. The examiner can normally be reached on Mon.-Thurs : 7:30am - 5:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frantz Coby can be reached on (571) 272-4017. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Juvena W Loo
Examiner
Art Unit 2609


FRANTZ COBY
SUPERVISORY PATENT EXAMINER